The Importance of Patents for Scientists
What is IP – Intellectual Property?

- Products of the mind
- Products of research
- As with all other forms of property IP has VALUE and deserves to be protected
- Protection is provided by law
Types of IP

- Patents
- Trade Marks
- Registered and unregistered Designs
- Copyright
- Confidential Information/Trade Secrets
“The US Government did what mattered most: protected intellectual property rights. The PC software industry never could have emerged from a country that tolerated the widespread theft of copyrighted material”

*Bill Gates, The Guardian, London, 2.2.95*
Misconception No. 1

A patent gives you the right to use your invention

Wrong…. VERY wrong…
Key Facts (1): the most important thing you need to know about patents...

A patent does not give you the right to use your invention: it gives you the right to stop other people using your invention commercially.

*If you invent and patent the wheel, the inventor and patentee of the car cannot make cars without your permission.*
Key Facts (2) : requirements for patentability

An invention is patentable if it is:

1. Includes an inventive step
2. Is useful in industry
3. Is not excluded by statute

Provisions vary from country to country
Misconception No. 2

I can get a patent for my new idea

Wrong. Only products and processes can be patented.
Key Facts (3): US vs. Rest of World

- National laws differ from each other
- If in doubt, it is usually safe to assume:
  - all countries are roughly the same, except
  - the US may be different.

*Key difference: first to invent vs. first to file*
Key Facts (4): Duration of Patents

Potential lifetime around 21 years
Obtaining a patent can take many years
Renewal fees are payable to keep patents alive
Most patents live for much less than 21 years
Some patents in some countries can be extended
Key Facts (5): Enforcement of patents

Enforcement of patents is through the local courts – and is expensive.

Just because you have had a patent granted, it does not follow that it is valid.

It is possible for competitors to attack and destroy a patent during court proceedings.
Misconception No. 3

Patents and publication are incompatible

Wrong. Patents are all about publication (but the timing is important)
The public interest “deal” on patents....

The state grants a monopoly over commercial use of the invention for a limited period of time....

...in return for a full disclosure of the invention to the public.

*Publication of patents stimulates invention and hence economic growth*
Why patent? - *millions* of reasons to obtain a patent...

Some notable damages payments for patent infringement:

- $900,000,000 – Polaroid vs. Kodak (instant cameras, US)
- $500,000,000 – Eolas vs. Microsoft (ActiveX, US)
- £4,000,000 – Dyson vs. Hoover (vacuum cleaners, UK)
Why patent?

*Penicillin* – invented

Howard Florey, Oxford, 1940s
Why patent?

Hovercraft – invented Christopher Cockerell, 1950s
Spotting winners…

“The phonograph…is not of any commercial value”  Thomas Edison, c1880

“Heavier-than-air flying machines are impossible”  Professor Lord Kelvin, c1895

“I think there is a world market for about five computers”  Tom Watson, IBM, 1943

“There is no reason for any individual to have a computer in their home”  Ken Olson, DEC, 1977
Why patent?

*Lipitor®* – the world’s best selling drug, invented 1980s.
Why patent?

- Pfizer are fighting a worldwide patent war over Lipitor®.
- They may lose 15 months of patent life in the US. Does this matter?
- Sales of Lipitor® in the US Q3 2006 were $2.1bn. On this basis, 15 months sales are worth
Why patent?

- Pfizer are fighting a worldwide patent war over Lipitor®.
- They may lose 15 months of patent life in the US. Does this matter?
- Sales of Lipitor® in the US Q3 2006 were $2.1bn. If these sales are worth $10.5bn, only a small amount of competition will cost Pfizer a lot of money.